

P a t e n t C l a i m s

1. A vehicle provided with at least one front axle and at least one rear axle, with loading boxes or loading surfaces to accommodate cargo, with a vehicle frame and with a loading ramp situated in the rear area of the vehicle frame, in conjunction with which at least one part of the loading boxes or loading surfaces is capable of being raised and lowered in a vertical direction by means of lifting devices arranged on the vehicle frame,
characterized in that the at least one loading box or loading surface (9) behind the at least one rear axle (3) is arranged in such a way that it is executed as an internal loading ramp, in conjunction with which at least one lateral opening surface and at least one rearward-facing opening surface arranged on the vehicle frame (1) are provided, which opening surfaces expose loading openings for the purpose of loading or unloading.
2. The vehicle as claimed in claim 1,
characterized in that the loading openings are exposed in a predetermined position of the lifting device (11).
3. The vehicle as claimed in claim 1,
characterized in that a door-like arrangement (20) is provided as an opening surface at the rear of the vehicle.
4. The vehicle as claimed in claim 3,
characterized in that the door-like arrangement is executed as a roller door (20).
5. The vehicle as claimed in claim 4,
characterized in that the roller door (20) is guided in lateral guides.
6. The vehicle as claimed in claim 1,

characterized in that a sliding door (16) is provided at least on one side of the vehicle in the area of at least one loading box or loading surface (9) that is capable of being raised and lowered.

7. The vehicle as claimed in claim 6,

characterized in that a sliding door (16) is provided on both sides in the area of the loading box or loading surface (9) that is capable of being raised and lowered.

8. The vehicle as claimed in claim 7,

characterized in that the sliding doors (16) are provided at their rear ends with vertical guide rails (19) for the purpose of guiding the roller door (20).

9. The vehicle as claimed in claim 6 or 7,

characterized in that the sliding door (16) is provided at its rear end with an inward-facing angled section (18), on which lighting devices (23) for the rear end of the vehicle are arranged.

10. The vehicle as claimed in claim 6,

characterized in that the sliding door or the sliding doors (16) is/are attached to the roof structure (13) behind the rear axle (3) and is/are guided in horizontal guide rails (19).

11. The vehicle as claimed in claim 4,

characterized in that the roller door (20) is accommodated in its raised state in the roof structure (13) behind the rear axle (3).

12. The vehicle as claimed in one of claims 1 to 11,

characterized in that the lifting device (11) for the at least one loading box or loading surface (9) arranged behind the rear axle (3) is arranged on the C-pillar of the vehicle frame.

13. The vehicle as claimed in claim 12,

characterized in that the lifting device (11) is provided with lifting cylinders (12), which are arranged on vertical rails on the C-pillar.

14. The vehicle as claimed in claim 13,
characterized in that the lifting device (11) forms a portal structure (14) together with the rails.

15. The vehicle as claimed in claim 6,
characterized in that an enclosing wall section (22) is arranged in each case under the one or more sliding doors (16) or in front of these, which wall is provided as an access ramp in the lowered state of the loading box or the loading surface (9).

16. The vehicle as claimed in one of claims 1 to 15,
characterized in that an enclosing wall section (21) is arranged on the rear of the vehicle, which wall is provided as an access ramp in the lowered state of the loading box or loading surface (9).

17. The vehicle as claimed in one of claims 1 to 16 having a ladder frame as a part of the vehicle frame, which exhibits two longitudinal members (4,5) arranged at a distance from one another and transverse members (6) connecting the longitudinal members (4,5) to one another,

characterized in that the ladder frame is cut in the area of the at least one rear axle (3) to permit the installation of the internal loading ramp at a later date, and in that a lifting device (11) for the at least one loading box or loading surface (9) can be attached to the C-pillar of the vehicle frame (1) behind the rear axle (3).

18. The vehicle as claimed in one of claims 1 to 16 having a ladder frame as a part of the vehicle frame, which exhibits two longitudinal members (4,5) arranged at a distance from one another and transverse members (6) connecting the longitudinal members (4,5) to one another,

characterized in that the at least one loading box or loading surface (9) is arranged laterally on the ladder frame behind the at least one rear axle (3).

19. The vehicle as claimed in claim 18,
characterized in that a loading box or loading surface (9) is arranged on both sides of the ladder frame.
20. The vehicle as claimed in one of claims 17 to 19 having a ladder frame as a part of the vehicle frame, which exhibits two longitudinal members (4,5) arranged at a distance from one another and transverse members (6) connecting the longitudinal members (4,5) to one another,
characterized in that an auxiliary frame (25) for a chassis superstructure with loading boxes or loading surfaces (7,8,9,10), with lifting devices (11) for the loading boxes or loading surfaces, is provided with an internal loading ramp together with the roof structure (13) and opening surfaces, which auxiliary frame is capable of attachment to the longitudinal members (4,5) of the ladder frame.
21. The vehicle as claimed in claim 20,
characterized in that the auxiliary frame (25) is detachably attached via connecting devices (26, 27) to the longitudinal members (4,5) of the ladder frame.
22. The vehicle as claimed in claim 21,
characterized in that the connecting devices exhibit fixing plates (27) and screwed connections (26).